

## New Tool for Managing Septic Systems!

By Lisa Hajjar, DHEC-OCRM (Charleston)



Did you know that the Environmental Protection Agency (EPA) considers septic systems to be a viable, permanent alternative to central sewer *as long as they are properly installed and maintained*? That's good news to communities that rely on septic systems.

DHEC's Division of Onsite Wastewater Management regulates the permitting and installation of septic systems. DHEC has a strong, standardized program that strives to consistently address permitting issues statewide.

The management of septic systems is not regulated at the state level. DHEC responds to complaints and requests for assistance on problem septic systems, but the operation and maintenance of a septic system is left up to the individual homeowner.

In the Coastal Zone, efforts to promote septic system management have been spearheaded by DHEC's Office of Coastal Resource Management (OCRM) as part of its Coastal Nonpoint Program (CNP). The latest effort is the development of the Onsite Septic System Management Tool Kit CD for Local Governments. The Tool Kit CD is the end result of numerous coastal pilot projects conducted and sponsored by DHEC during the past 10 years. It was distributed in May 2006 to local governments, public utilities, and planning agencies in the Coastal Zone.

The interactive CD provides information to assist local planners and decision makers in developing a comprehensive septic system management strategy that will promote community health, protect natural resources, and even improve property

values through homeowner education. The CD looks and operates like a Web site with more than 80 documents, a database template, Web-links to state and national resources, PowerPoint presentations, and more. The documents include pilot project reports, EPA management guidelines, articles, fact sheets, case studies on local government management efforts, and septic management ordinance examples and templates.

While the CD was developed to fulfill the CNP requirements, it was written to be suitable for a state-wide audience. The tool kit will be available online so that the information can be kept current. Limited copies of the CD are also available.

For more information, please go to <http://www.scdhec.gov/environment/ocrm/> or contact Lisa Hajjar at (843) 744-5838 or [hajjarlm@dhec.sc.gov](mailto:hajjarlm@dhec.sc.gov).

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Turning the Tide

## Turning the Tide on runoff pollution

Winter 2007

SC DHEC's Bureau of Water

## MS4 Permit- What Lies Ahead?

By Arturo Ovalles, DHEC - MS4 Permit Writer

Municipal Separate Storm Sewer System, or MS4, permitting is a hot topic on the minds of municipalities and South Carolina Department of Health and Environmental Control (DHEC) personnel. The MS4 permit regulates stormwater that discharges directly into our waterways from MS4s. Each MS4 falls into one of three categories: large (an entity with a population of 250,000 or more), medium (between 100,000 and 249,999 residents), and small (fewer than 100,000 residents). These entities must follow the proper policies for obtaining a permit in order to avoid a stiff fine.

Under phase I regulations, South Carolina has one large MS4 and three medium MS4s. The regulations require medium and large MS4s to obtain National Pollutant Discharge Elimination System (NPDES) permits for stormwater discharges. South Carolina Department of Transportation (S.C. DOT) is the one large MS4. Medium MS4s include Greenville County, Richland County, and the City of Columbia. The S.C. DOT, Greenville County, and Richland County have all been issued individual MS4 NPDES permits by DHEC.

Phase II requires the 70 regulated small MS4s in South Carolina to obtain an NPDES permit for stormwater discharges. While a few of the regulated small MS4s have joined the medium MS4s with their existing permit, others are pursuing individual permits. The majority will apply for coverage under the NPDES general permit. A waiver can be granted to regulated small MS4s with fewer than 1,000 people located in an urbanized area. Of the nine entities in this category, three have been granted a waiver.

Regulated small MS4s are required to prepare and submit a stormwater management plan

(SWMP) addressing six minimum control measures (MCMs) as part of the permitting application process. These measures include:

- 1) Public education and outreach on storm water impacts
- 2) Public involvement and participation
- 3) Illicit discharge detection and elimination
- 4) Construction site stormwater runoff control

- 5) Post-construction stormwater management in new development and redevelopment
- 6) Pollution prevention and good housekeeping for municipal operations

The deadline for the development and implementation of MCMs 4 and 5 is September 1, 2007, regardless of the status of the permit application. Requests by regulated small MS4s to obtain delegation under the South Carolina Standards of Stormwater Management and Sediment Reduction Act to administer these MCMs must be received by December 31, 2006, in order for them to be effective by the September 1, 2007 deadline.

For more information, please contact: Arturo Ovalles at (803) 898-4178 or e-mail him at [ovallear@dhec.sc.gov](mailto:ovallear@dhec.sc.gov)



Arturo Ovalles- MS4 permitting

### Inside...

Forestry BMPs Protecting Water Quality.....Page 2

New Staff.....Page 3

Accountability Measurements.....Page 3

New Tool for Managing Septic Systems.....Page 4





## Forestry BMPs Protecting Water Quality

By Guy Sabin, SC Forestry Commission

**T**he piercing wail of a high-speed saw sounds above as another tree falls. Skidders transport the logs to the loading deck. There, logs are sorted for delivery to different mills, and will soon become the wood and paper products we use every day. As the smell of fresh-cut wood lingers in the air, so does the question – Is water quality being protected?

Landowners planning to cut timber can take precautions to protect the environment during forestry operations. Published guidelines and free services from the S.C. Forestry Commission (SCFC) can help prevent erosion and protect streams during timber harvesting.

The guidelines, called Best Management Practices (BMPs) for Forestry, are familiar to most who work in the forest industry. Logging contractors put them into practice every day to reduce environmental impacts. The greatest



Culverts are an important part of reducing sediment from road systems.

potential for inadequate compliance occurs during road construction, stream crossings, and in riparian zones. On request, Forestry Commission specialists will provide on-site recommendations and assistance with a free courtesy exam.

### What are BMPs?

BMPs are designed to protect streams and also contribute to scenic beauty, wildlife habitat, and outdoor recreation. They cover all aspects of forestry operations. Over the past 30 years, these guidelines have evolved into highly effective means to reduce environmental impacts during forestry operations.

### Do BMPs Really Work?

Using BMPs during harvesting can reduce sedimentation by one-tenth.

Several studies in South Carolina have proven that sites using BMPs meet state water quality standards and score well in water quality evaluation.

The SCFC monitoring of BMP implementation has shown continual improvement since monitoring began in 1990. The latest survey results indicate that 98 percent of timber harvests do an adequate or excellent job of protecting water quality.

### Are BMPs Mandatory?

Use of these guidelines is not required by law, but they are not exactly voluntary either. Federal and state laws that protect water quality also apply to forestry. The SCFC administers the BMP program to prevent water quality problems before violations occur. Failure to implement BMPs may result in a water quality violation that may carry severe penalties.

In addition, forest industries apply substantial pressure to use BMPs. Many timber companies will only accept wood from loggers who have attended training and demonstrated proper use of Best Management Practices.

### What Services are Available?

The SCFC has five specially trained BMP foresters to address water quality issues throughout the state. Ideally, a landowner will contact a BMP forester prior to harvesting timber. This way, the forester can help identify potential problem areas and recommend specific BMPs for the property.



Log deck, road layout, loading deck location, and harvesting systems are all part of BMPs.

Many times, logging jobs in progress are found by aerial observation, ground activities, or by notification. The SCFC also responds to complaints about timber harvesting activities. In these ways, BMP foresters locate

active logging jobs where they can offer a courtesy exam to provide assistance with proper implementation of BMPs.

Equally important are the education and training programs. The SCFC assists with delivery of the Timber Operations Professional (TOP) program in partnership with the S.C. Forestry Association and Clemson University. The TOP program reaches hundreds of loggers, landowners, and forestry professionals each year with information about water quality protection and other important issues.

### A Successful Partnership

The success of South Carolina's BMP program comes from the close cooperation of several groups. SCFC, DHEC, U.S. Environmental Protection Agency, landowners, loggers, and forest industries are all supporters of the BMP program in different

ways. As a result of these partnerships, South Carolina has a highly effective and nationally recognized BMP program for forestry.

More detailed information on BMPs for

forestry is available on the SCFC website at <http://www.forestry.state.sc.us>. Landowners may also request free assistance from BMP Foresters to ensure water quality protection during harvesting and forestry operations.

To request a BMP courtesy exam or for more information, please contact: Guy Sabin at (803) 896-8593 or e-mail him at [gsabin@forestry.state.sc.us](mailto:gsabin@forestry.state.sc.us)

The greatest potential for inadequate compliance occurs during road construction, stream crossings, and in riparian zones.

## 319 Programs Call for Accountability Measurements

By Andy Miller, DHEC- Saluda & Santee Watershed Manager

**I**n this era of tight budgets and calls for tax relief, government programs are under increasing scrutiny. This is true for the 319 program as well as almost all federal government programs. Enacted in 2002, the White House Office of Management and Budget developed the Program Assessment Rating Tool (PART), which provides a means for comparing and evaluating government programs. This questionnaire asks all federal program managers, which includes state 319 grantees, to provide detailed information about how their achievements and results can be shown to objectively impact their program's stated missions.

This initiative has had ramifications for DHEC's Bureau of Water. With basic guidance from the

Environmental Protection Agency (EPA), DHEC staff members have been required to develop a method to calculate load reductions for all 319 projects in the state. Using basic spreadsheet models and professional judgment, progress has been made in estimating these load reductions. Since each BMP load reduction in a project has to be calculated individually, site-specific data such as soils, acres treated, number of livestock, linear feet of streams treated, etc., have to be compiled. South Carolina's 319 cooperators and DHEC staff have been working together to acquire this information in a timely manner.

An additional related requirement is to geolocate each BMP in the state on EPA's WATERS GIS database. This

system will provide a means of graphically displaying environmental activities at the watershed level throughout the United States. The next major evaluation of the 319 program will be conducted using all data assembled prior to February 15<sup>th</sup>, 2007. DHEC will continue to diligently acquire documentation of success stories and load reduction information to assist in proving the success of the 319 program in enhancing South Carolina's water quality.

For examples of effective and ineffective national programs please visit: <http://www.whitehouse.gov/omb/expect-more/index.html>  
For more about rating the performance of government programs: <http://www.gpoaccess.gov/usbudget/fy04/pdf/budget/performance.pdf>  
For additional information please contact: Andy Miller 803-898-4031 or e-mail him at [MILLERCA@dhec.sc.gov](mailto:MILLERCA@dhec.sc.gov)

## New Staff at DHEC

### New Faces Dedicated to Improving Water Quality

Left- Cheryl Salomone, nonpoint source outreach coordinator

**L**ook no more! DHEC's new nonpoint source outreach program coordinator has arrived. My name is Cheryl Salomone. I am the new producer and editor of your favorite nonpoint source newsletter, *Turning the Tide*.

I graduated from Coastal Carolina University with a Bachelor of Science in Health Promotion and a minor in Spanish. I will be working on launching a new nonpoint source awareness campaign and providing outreach guidance and assistance to other runoff pollution programs. Look for me to be involved in raising awareness about things we can all do to improve water quality.

If you'd like to learn more about DHEC's Nonpoint Source Outreach program, please give me a call at (803) 898-4187 or e-mail me at [salomocm@dhec.sc.gov](mailto:salomocm@dhec.sc.gov).



Middle- Roger Hall, Pee Dee watershed manager

Right- Rebecca Haynes, watershed outreach coordinator

**H**! My name is Rebecca Haynes and I am your new DHEC watershed outreach coordinator. With a Master's degree in Conservation Ecology and Sustainable Development from the University of Georgia, I am dedicated to improving the water quality of South Carolina through technical education and outreach.

I will provide outreach guidance and support to Section 319 grantees and stakeholders, develop outreach programming for priority watersheds, and work with our DHEC watershed managers on outreach for water quality issues including Total Maximum Daily Loads (TMDLs). Please contact me at (803) 898-4211 or [haynesrl@dhec.sc.gov](mailto:haynesrl@dhec.sc.gov).